AugerPrime
Radio Detector
OPERATIONS READINESS REVIEW
Charges to the Review Committee

Review to be started in:

Malargüe, March 2025 meeting

https://indico.nucleares.unam.mx/event/2347/

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Review Committee Members
Petr Travnicek (chair)
Mauro Gajardo
Nicolás González
Frank Schröder
Ricardo Sato

Objective:

The Auger Project Management Plan defines the objective of the Operations Readiness Review as:

"A subsystem only becomes part of the operation of the Observatory when it has passed an Operations Readiness Review. This review ensures that the subsystem is in effective, stable operation, all documentation has been filed, spares are available and the staff has been trained."

The purpose of the review is to determine if the RD subsystem is ready to be included in the operation of the observatory for science production. Additionally, the review committee should asses if all the necessary material needed for operation and maintenance are existing and available.

Detailed frame of the Review:

- SALLA antenna and all mechanical components and supports;
- HF electronics of the antenna (LNA), signal digitizer and UUB electrical interface;

The review should assess, but not be limited to, the following issues:

Equipment availability and readiness

- Are components and software fully commissioned, operating reliably, and meeting performance requirements?
- Are all the hardware, power and software interfaces fully functional, compatible and operational?
- Are special tools and testing equipment required for routine maintenance present and available to the Observatory staff?
- Are the most common failures are yet known, understood and have a mitigation plan?
- Is there a long-term plan for component repairs or replacement?
- Has a reliable source for all spare parts, tools, and consumables been identified for future procurements? Are spares available on site as required?

Data Management

- Is RD data well integrated into the data stream?
- Is the RD data consistent and reliable?
- Is the communication interface with UUB stable?
- Can CDAS handle the volume of data produced by RD?
- Is the monitoring of RD in place and well understood?

Technical Documentation

- Are drawings, schematics, and any other relevant documents complete and posted to CERN EDMS and/or PMS?
- Are instructions for operating and maintaining software code, as well as the code itself, available and organized?
- Is a complete list of equipment and components including part numbers and vendor contact information available?

Procedures. The following procedures must be complete:

- General operation.
- Hardware and software troubleshooting and maintenance.
- Process for handling major repairs.
- Inclusion of safety considerations in all procedures.

Training.

- Has an appropriate number of observatory personnel been trained to operate and provide routine maintenance?

Operations costs.

- Evaluate the annual resources (person-power & costs) required for routine operation and maintenance for each subsystem, including materials and equipment. Discuss anticipated rates of failures and frequency of repairs and replacements.